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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/315,980	05/21/1999	KATSUYOSHI HAYASHI	040782-5061	7194

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EXAMINER

TRAN, THAI Q

ART UNIT	PAPER NUMBER
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2615

7

DATE MAILED: 10/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/315,980

Applicant(s)

HAYASHI ET AL.

Examiner

Thai Tran

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 June 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4-6 and 9-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 4-6 and 9-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed June 10, 2003 have been fully considered but they are not persuasive.

In re pages 5-6, applicants argue that the recording medium of new independent claims 17 and 20 is statutory subject matter because the recording medium is defined in terms of its hardware and software combination. See MPEP § 2106. IV. B. 2.

accordingly, applicants respectfully submit that independent claims 17 and 20 full comply with 35 U.S.C. § 101 and, further, applicants respectfully submit that dependent claims 4, 5, 6, 18, 19, 21 and 22 comply with 35 U.S.C. § 101 for at least the same reason as discussed above with regard to independent claims 17 and 20.

In response, the examiner respectfully disagrees. It is noted that the preambles of claims 17 and 20 recite "a recording medium for providing a **navigation system** ...". The critical question to be answered is, "Do the limitations in the body of the claim limit the device to the environment or use specified in the preamble?" See In re Van Lint, 148 USPQ 285 (CCPA 1966), Kropa v. Robie, 88 USPQ 478 (CCPA 1951). If they do the preamble must be given weight in determining patentability. An intended use clause found in the preamble is not afforded the effect of a distinguishing limitation unless the body of the claims sets forth structure which refers back to, is defined by, or otherwise draws life and breath from the preamble. In re Casey, 152 USPQ 235 (CCPA 1967). The navigation system in the preamble of claims 17 and 20 are not given any

patentable weight because the bodies of claims 17 and 20 do not draw life and breath from the navigation system of the preamble.

It is further noted that claims 17 and 20 are directed to a recording medium storing navigation information. The navigation information in claims 17 and 20 is considered to be "non-functional descriptive material" because it does not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention which permit the data structure's functionality to be realized. As stated in the last Office Action, merely claiming nonfunctional descriptive material stored in a computer-readable medium does not make it statutory. See MPEG, 2106, IV, B, 1.

In re pages 6-7, applicants argue that Khavakh et al fails to disclose the claimed a plurality of navigation information for maps having a same attribute are recorded on a same one of the plurality of recording layers amongst other features because Khavakh et al discloses a system in which roads are classified into rank are stored together in bands.

In response, the examiner respectfully disagrees. Khavakh et al discloses in page 3, paragraph #0036 that "In one embodiment ... the map database 30 for a geographical area may be stored in layers. The lowest layer ("0") contains records that represent roadways of all ranks, the next higher layer ("1") contains roadways of rank "1" and higher, the next higher layer ("2") contains roadways of rank "2" and higher, and so on." From the above passage, rank "0" is recorded in layer ("0"), rank "1" is recorded in layer ("1"), rank "2" is recorded in layer ("2"), and so on. It is noted that the navigation

information for maps of Khavakh et al having same attribute is recorded on the same layer (rank "1" is recorded in layer ("1")).

In re page 7, applicants argue that Khavakh et al fails to disclose the claimed a plurality of areas on each of the recording layers, wherein each one of the plurality of navigation information for one of the plurality of maps is in a same area of at least two of the plurality of recording layers as recited in claim 20.

In response, the examiner respectfully also discloses the claimed "a plurality of areas on each of the recording layers, wherein each one of the plurality of navigation information for one of the plurality of maps is in a same area of at least two of the plurality of recording layers" in page 3, paragraph #0036 because rank "2" are recorded in layer ("0"), layer ("1"), and layer ("2").

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 17-22 and 4-6 are rejected under 35 U.S.C. 101 because claims 1-8 are directed to a recording medium storing descriptive material. The claimed descriptive material does not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention which permit the data structure's functionality to satisfy the requirements of 35 U.S.C. 101. See Warmerdam, 33 F.3d, 31 USPQ2d and MPEP, 2106, IV.

Claim Rejections - 35 USC § 102

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4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 17-22 and 4-6 are rejected under 35 U.S.C. 102(e) as being anticipated by Khavakh et al (US 2003/0028319 A1).

Regarding claim 17, Khavakh et al discloses a recording medium (page 2, paragraph #0034 and page 3, paragraph #0036) for providing a navigation system with navigation information for a map, comprising:

a plurality of recording layers on each of which a plurality of navigation information is stored, wherein a plurality of navigation information for maps having a same attribute are recorded on a same one of the plurality of recording layers (page 3, paragraph #0036).

Regarding claim 18, Khavakh et al also discloses the claimed wherein navigation information for a first map is stored on a first area of a first recording layer and other navigation information is stored on the first area of a second recording layer (page 3, paragraph #0036).

Regarding claim 19, Khavakh et al further discloses the claimed wherein the same attribute is map scale (page 3, paragraph #0036).

Regarding claim 20, Khavakh et al discloses a recording medium (page 2, paragraph #0034 and page 3, paragraph #0036) for providing a navigation system with navigation information for a map, comprising:

a plurality of recording layers on each of which a plurality of navigation information is stored for a plurality of maps (page 3, paragraph #0036);

a plurality of areas on each of the recording layers, wherein each one of the plurality of navigation information for one of the plurality of maps is in a same area of at least two of the plurality of recording layers (page 3, paragraph #0036).

Regarding claim 21, Khavakh et al discloses the claimed wherein the plurality of navigation information includes first map data having a first map scale for a first region (page 3, paragraph #0036); and second map data having a second map scale for a first region, wherein the first map data is recorded in a first area of a first recording layer and the second map data is recorded in a first area of a second recording layer (page 3, paragraph #0036).

Regarding claim 22, Khavakh et al discloses the claimed wherein the plurality of navigation information includes first map data having a first map scale for a first region (page 3, paragraph #0036); and second map data having at least one of location data and voice data corresponding to the first region, wherein the first map data is recorded in a first area of a first recording layer and the second map data is recorded in a first area of a second recording layer (page 3, paragraph #0036 and page 1, paragraph #0002).

Regarding claim 4, Khavakh et al discloses the claimed wherein the plurality of navigation information includes route search data and location search data (page 3, paragraph #0036), and wherein the route search data is recorded on one of the plurality of recording players and the location search data is recorded on another one of the plurality of recording layers (page 3, paragraph #0036).

Regarding claim 5, Khavakh et al discloses wherein the plurality of navigation information includes map data (page 3, paragraph #0036), voice data (page 1, paragraph #0002) associated with the map data, and voice data independent of map data, and wherein the map data and the voice data associated with the map data are recorded on one of the plurality of recording layers and the voice data independent of the map data is recorded on another one of the plurality of recording layers (page 3, paragraph #0036 and page 1, paragraph #0002).

Regarding claim 6, Khavakh et al discloses wherein the plurality of navigation information includes map data and voice data (page 3, paragraph #0036 and page 1, paragraph #0002), and wherein the map data is recorded on one of the plurality of recording layers and the voice data is recorded on another one of the plurality of recording layers (page 3, paragraph #0036 and page 1, paragraph #0002).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 9-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Khavakh et al (US 2003/0028319 A1) in view of Sawabe et al (US 2002/0176695 A1).

Regarding claim 9, Khavakh et al discloses an information reproducing apparatus (Fig. 1) for reproducing information from a recording medium having a plurality of recording layers, on each of which navigation information is recorded, wherein navigation information having a same attribute is recorded in a same one of the plurality of recording layers (page 2, paragraph #0034 and page 3, paragraph #0036), the apparatus comprising:

reproducing means (page 2, paragraphs #0033 and #0034) for reproducing the navigation information from each of the recording layers of the recording medium.

However, Khavakh et al does not specifically disclose means for emitting a light beam for reading the navigation information from the recording medium; focus control means for controlling a position of the light beam in a focus direction; and tracking control means for controlling the position of the light beam in a tracking direction.

Sawabe et al teaches a DVD player having means (an optical pickup 80 of Fig. 8, page 10, paragraph #0143 and page 11, paragraph #0146) for emitting a light beam for reading the navigation information from the recording medium; focus control means (focus servo control disclosed in page 11, paragraph #0146) for controlling a position of the light beam in a focus direction; and tracking control means (tracking servo control disclosed in page 11, paragraph #0146) so that the light beam of the reproducing head can be irradiated precisely onto the information track and can be focused on the information record surface of the DVD 1.

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the DVD player as taught by Sawabe et al into Khavakh et al's system in order to accurately reproducing the video signal recorded on the DVD by controlling the focusing and tracking of the reproducing head.

Regarding claim 10, Khavakh et al also discloses the claimed wherein the plurality of navigation information includes first map data corresponding to a first area and second map data corresponding to a second area that is different from the first area (page 3, paragraph #0036), and wherein the first map data is recorded on one of the recording layers, and the second map data is recorded on another one of the plurality of recording layers (page 3, paragraph #0036).

Regarding claim 11, Khavakh et al further discloses the claimed wherein the plurality of navigation information includes map data corresponding to a plurality of scales (page 3, paragraph #0036), and wherein the map data having a same scale is

recorded on the same one of the plurality of recording layers (page 3, paragraph #0036).

Regarding claim 12, Khavakh et al discloses the claimed wherein the plurality of navigation information includes route search data and location search data (page 3, paragraph #0036), and wherein the route search data is recorded on one of the plurality of recording players and the location search data is recorded on another one of the plurality of recording layers (page 3, paragraph #0036).

Regarding claim 13, Khavakh et al discloses wherein the plurality of navigation information includes map data (page 3, paragraph #0036), voice data (page 1, paragraph #0002) associated with the map data, and voice data independent of map data, and wherein the map data and the voice data associated with the map data are recorded on one of the plurality of recording layers and the voice data independent of the map data is recorded on another one of the plurality of recording layers (page 3, paragraph #0036 and page 1, paragraph #0002).

Regarding claim 14, Khavakh et al discloses wherein the navigation information includes map data and voice data (page 3, paragraph #0036 and page 1, paragraph #0002), and wherein the map data is recorded on one of the plurality of recording layers and the voice data is recorded on another one of the plurality of recording layers (page 3, paragraph #0036 and page 1, paragraph #0002).

Regarding claim 15, Khavakh et al discloses an information reproducing apparatus (Fig. 1) for reproducing information from a recording medium having a plurality of recording layers, in which there are a plurality of areas and on each of which

navigation information is recorded, wherein navigation information having a same attribute is recorded in a same area of each of the plurality of recording layers (page 2, paragraph #0034 and page 3, paragraph #0036), the apparatus comprising:

reproducing means (page 2; paragraphs #0033 and #0034) for reproducing the navigation information from each of the recording layers of the recording medium.

However, Khavakh et al does not specifically disclose means for emitting a light beam for reading the navigation information from the recording medium; focus control means for controlling a position of the light beam in a focus direction; and tracking control means for controlling the position of the light beam in a tracking direction.

Sawabe et al teaches a DVD player having means (an optical pickup 80 of Fig. 8, page 10, paragraph #0143 and page 11, paragraph #0146) for emitting a light beam for reading the navigation information from the recording medium; focus control means (focus servo control disclosed in page 11, paragraph #0146) for controlling a position of the light beam in a focus direction; and tracking control means (tracking servo control disclosed in page 11, paragraph #0146) so that the light beam of the reproducing head can be irradiated precisely onto the information track and can be focused on the information record surface of the DVD 1.

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the DVD player as taught by Sawabe et al into Khavakh et al's system in order to accurately reproducing the video signal recorded on the DVD by controlling the focusing and tracking of the reproducing head.

Regarding claim 16, Khavakh et al also discloses the claimed wherein the navigation information includes first map data corresponding to an area at a first scale and second map data corresponding to the area at a second scale that is different from the first scale (page 3, paragraph #0036), and wherein the first map data and the second map data are recorded on one of the recording layers and another one of the recording layers, respectively, in the same area (page 3, paragraph #0036).

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thai Tran whose telephone number is (703) 305-4725. The examiner can normally be reached on Mon. to Friday, 8:00 AM to 5:30 PM.

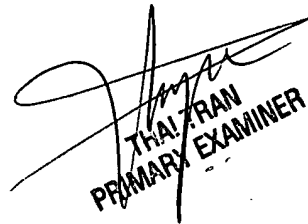
The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

TTQ
September 30, 2003


THAI TRAN
PRIMARY EXAMINER